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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/592,975 | 09/15/2006 | Fumihiko Mizukami | CU-5078 BWH | 3770 |

26530 7590 12/17/2009

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| EXAMINER | |
|---|---|
| MCCLELLAND, KIMBERLY KEIL | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 1791 | |

| MAIL DATE | DELIVERY MODE |
|---|---|
| 12/17/2009 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/592,975 | MIZUKAMI ET AL. | |
| | Examiner | Art Unit | |
| | KIMBERLY K. MCCLELLAND | 1791 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *14 October 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) *6-10* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 September 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/13/06, 07/14/08, 07/31/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

***Election/Restrictions***

1. Applicant's election of Group I, claims 1-5 in the reply filed on 10/14/09 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

2. Claims 6-10 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/14/09.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. With respect to independent claim 1, the phrase, "for transferring a thermal transfer sheet in which a hologram or a diffraction grating is laminated on a base material film" is unclear. It is unclear if these method steps are required for the currently claimed method. If the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of

no significance to claim construction. Pitney Bowes, Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165 (Fed. Cir. 1999). Clarification is required.

6. The term "minute area unit" in claim 1 is a relative term which renders the claim indefinite. The term "minute" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear how big or small an area must be to be considered minute.

7. The phrase, "a direction of recorded information for enhancing optical effects" is unclear. What is the recorded information? Where is it recorded? What are the optical effects? How are they enhanced? Clarification is required.

8. The phrase, "coincide with each other" in independent claim 1 is unclear. It is unclear what relationship two directions must have to coincide. Clarification is required.

9. A to claim 5, the phrase, "a interference pattern is formed in an interference pattern forming range constructing a whole of the hologram, the interference pattern being composed of an element range as a unit obtained by slicing the interference pattern forming area in a horizontal direction" is unclear. Is the hologram physically sliced? It is unclear what method steps are being recited. Clarification is required.

### *Claim Rejections - 35 USC § 102*

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-2 and 4-5 are rejected under 35 U.S.C. 102(b) as being Japanese Patent Application Publication No. 08-258437 to by Tawara (machine translation provided).

12. With respect to claim 1, Tawara discloses a foil transfer method, including a direction of heating (i.e. horizontal) sequentially by a heat source of a minute area unit and a direction of recorded information (i.e. horizontal) for enhancing optical effects of the hologram or the diffraction grating coincide with each other (See paragraphs 0008-0010 and Figure 1).

13. Examiner notes a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

14. As to claim 2, Tawara discloses the heat source is a heat generation element of a thermal head (See paragraph 0004).

15. As to clam 4, Tawara discloses the hologram is a rainbow hologram (See paragraph 0016).

16. As to claim 5, Tawara discloses the hologram is a computer hologram in which an interference pattern is formed in an interference pattern forming range constructing a whole of the hologram, the interference pattern being composed of an element range as

a unit obtained by slicing the interference pattern forming area in a horizontal direction (See paragraph 0015; and 0026).

***Claim Rejections - 35 USC § 103***

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

18. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Application Publication No. 08-258437 to by Tawara (machine translation provided) as applied to claims 1-2 and 4-5 above, and further in view of U.S. Patent Application Publication No. 2002/0168513 to Hattori et al.

19. As to claim 3, Tawara does not specifically disclose the heat source is a laser.

20. Hattori et al. discloses an imaging method, including in the art of holographic transfer (See paragraph 0225) it is known as an art-recognized equivalent to substitute a laser for a thermal head as a source of heat during thermal transfer (See paragraph 0211). It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the art-recognized equivalent laser for the thermal head heat source disclosed by Tawara.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KIMBERLY K. MCCLELLAND whose telephone number is (571)272-2372. The examiner can normally be reached on 8:00 a.m.-5 p.m. Mon-Thr.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Philip C. Tucker can be reached on (571)272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kimberly K McClelland/
Examiner, Art Unit 1791

KKM

/Philip C Tucker/
Supervisory Patent Examiner, Art Unit 1791